WHAT IS CLAIMED IS:

1. A method of treating a congenital protein deficiency in a subject, said method comprising administering to the subject endothelial progenitor cells that comprise a gene encoding a functional form of the protein responsible for said congenital deficiency at a stage of the subject's life at which non-pathologic vasculogenesis occurs.

2. The method of claim 1, wherein the subject is treated pre-natally.

3. The method of claim 1, wherein the subject is treated post-natally.

4. The method of claim 3, wherein the subject being treated post-natally is still continuously exhibiting signs of non-pathological vasculogenesis.

5. The method of claim 1, wherein the subject is a human.

6. The method of claim 1, wherein the congenital protein deficiency is due to a complete protein deficiency.

7. The method of claim 1, wherein the congenital protein deficiency is due to an incomplete protein deficiency.

8. The method of claim 1, wherein the congenital protein deficiency is due to at least one mutation in a gene encoding the protein, wherein the mutation results in reduced activity of the protein.

9. The method of claim 1, wherein the congenital protein deficiency comprises a blood protein disorder or lysosomal storage disease.

10. The method of claim 9, wherein the blood protein disorder comprises hemophilia A, hemophilia B, von Willebrand disease, α_1-antitrypsin deficiency, or antithrombin III deficiency.

11. The method of claim 10, wherein the blood protein disorder is hemophilia A.

12. The method of claim 10, wherein the blood protein disorder is hemophilia B.

13. The method of claim 10, wherein the blood protein disorder is von Willebrand disease.

14. The method of claim 9, wherein the lysosomal storage disease comprises Gaucher's disease, mucopolysaccharidosis type VII (MPS VII), Fabry disease, mucopolysaccharidosis type I (MPS I), Niemann-Pick disease, Farber disease, or Pompe disease.

15. The method of claim 14, wherein the lysosomal storage disease is Gaucher's disease.

16. The method of claim 14, wherein the lysosomal storage disease is MPS VII.

17. The method of claim 14, wherein the lysosomal storage disease is Fabry disease.

18. The method of claim 14, wherein the lysosomal storage disease is Niemann-Pick disease.

19. The method of claim 1, wherein the endothelial progenitor cells comprise autologous endothelial progenitor cells.

20. The method of claim 19, wherein the autologous endothelial progenitor cells are modified *ex vivo* prior to administration thereof to the subject in need of treatment, wherein the modification of the cells comprises introducing into said cells a gene encoding a functional form of the protein responsible for said congenital deficiency.

21. The method of claim 1, wherein the endothelial progenitor cells comprise heterologous endothelial progenitor cells.

22. The method of claim 21, wherein the heterologous endothelial progenitor cells are modified *ex vivo* prior to administration thereof to the subject in need of treatment, wherein the modification of the cells comprises introducing into said cells a gene encoding a functional form of the protein responsible for said congenital deficiency, wherein the deficient protein is not expressed by endothelial cells of other subjects not suffering from the congenital protein deficiency.

23. The method of claim 21, further comprising administering to the subject an immunosuppressive drug.

24. The method of claim 23, wherein the immunosuppressive drug is selected from the group consisting of: Cyclosporine A, prednisone, methyl prednisolone, azathioprine, cyclophosphamide, antilymphocyte globulin, and antithymocyte globulin.

25. The method of claim 24, wherein the immunosuppressive drug is Cyclosporine A.

26. The method of claim 1, further comprising administering to said subject a therapeutically-effective dose of radiation prior to the administration of endothelial progenitor cells.

27. The method of claim 1, further comprising administering to said subject an endothelial cell mitogen.

28. The method of claim 27, wherein the endothelial cell mitogen is selected from a group consisting of: vascular endothelial growth factor (VEGF), acidic and basic fibroblast growth factors (aFGF and bFGF respectively), epidermal growth factor (EGF), transforming growth factor α and β (TGF-α and TGF-β respectively), platelet-derived endothelial growth factor, platelet-derived growth factor, tumor necrosis factor α (TNF-α), hepatocyte growth factor (HGF), insulin like growth factor, erythropoietin, colony stimulating factor (CSF), macrophage-CSF (M-CSF), granulocyte/macrophage CSF (GM-CSF), and nitric oxide synthase.

29. The method of claim 28, wherein the endothelial cell mitogen is VEGF.